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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,384	03/15/2004	Laszlo Man	03191/100G988-US2	3163

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EXAMINER

VANAMAN, FRANK BENNETT

ART UNIT	PAPER NUMBER
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3618

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/801,384

Applicant(s)

MAN ET AL.

Examiner

Frank Vanaman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 11 and 13-20 is/are rejected.
- 7) ☒ Claim(s) 21-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Status of Application

1. Applicant's amendment, filed June 9, 2005, has been entered in the application. Claims 1-26 remain pending; claims 9 and 12 are withdrawn from consideration; claims 1-8, 10, 11 and 13-26 are under examination.

Priority

2. Receipt is acknowledged of papers submitted July 7, 2005, under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

3. The pertinent portions of 35 USC 102 relied upon herein may be found in a previous office action.
4. Claims 1, 2, 5, 6, 10, 11, 13, 15, 16-18, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Tabata et al. (US 5,935,040, filed 7/1997, cited previously by applicant). Tabata et al. teach a vehicle having a power train including a combustion engine (12) with a drive shaft, a transmission (18) with an input shaft, an energy converter (14) which can operate at least as a motor and generator; with an energy converter shaft (14r) turning at a different rate; which has a rotary transfer device on the drive shaft, at a front end of the transmission, facing away from the transmission towards the engine, the converter including a rotary shock/vibration absorbing device (30), and being in the form of an interactive connection (50, 16, CE1, CE2) including at least one gear pair (16c, 16s, 16r of the planetary gearing set including, a ring gear, sun gear, planet gear and planet gear carrier) the gears of the converter being located within the housing (phantom lines, element 24, figure 1), the interactive connection being connectable to the drive shaft, which can select a plurality of rpm ratios (through the operation of the two clutches CE1 and CE2) so as to function in at least two operating modes including a start-up mode (Mode 9-- for starting the combustion engine, wherein torque flows from the converter to the engine) and a driving mode (Mode 1-- for propelling the vehicle, wherein torque is delivered to the vehicle drive train) and a generation mode (Mode 3-- for charging while driving, wherein torque flows to the converter). Note that a differential geared device, because of its differential nature, is capable of self-setting rpm ratios based on the inputs thereto and outputs

therefrom. the driving shaft extending from a rear portion of the engine, facing the transmission, where the interactive connection is located; there being provided a torque coupling device (C1, C2) for connecting and disconnecting the transmission from the drive shaft, the plural clutches forming plural torque delivery paths, each being either upstream or downstream with respect to the converter, engine and transmission, based on the operating mode (i.e., driving or starting) and the flow of torque at any selected time.

Claim Rejections - 35 USC § 103

5. The pertinent portions of 35 USC 103 relied upon herein may be found in a previous office action.

6. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabata et al (cited above). The reference to Tabata et al. is discussed above and fails to specifically teach the converter rpm rate as being higher than the engine rate in the starting mode, and that in one mode the rpm ratio is smaller than the ratio in another mode. It is well known in the motive-power arts to adjust the relative speeds of engines and electric machines for the purpose of operation in high-efficiency regions, or to adjust torque outputs, and as such, it would have been obvious to one of ordinary skill in the art at the time of the invention to adjust the converter rpm rate with respect to the engine rate so that the engine is rotated at an appropriate speed for starting, when the converter is running at a speed where it can develop sufficient torque to turn the engine. Further, it would have been obvious to one of ordinary skill in the art at the time of the invention to adjust the relative ratios for two operating modes, for example, such that the rpm ratio of one mode is smaller than in another mode, for the purpose of adjusting the relative speeds of the rotating components, in order to insure that charging is accomplished in a most efficient speed range for the converter.

Claims 3, 4, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabata et al. in view of Brinkmeyer et al. (US 5,539,286). The reference to Tabata et al. is discussed above and fails to teach the drive connection to the converter as comprising a pair of sheaves or pulleys and an endless loop or belt. Brinkmeyer et al. teaches a drive for an electrical machine wherein a pair of sheaves or pulleys (e.g., 32,

24) and an endless loop belt (15) are used to connect the machine and engine. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a pulley-and belt connection for connecting the electrical converter and engine shaft taught by Tabata et al. for the purpose of providing the converter to the side of the engine or transmission, advantageously shortening the overall length of the engine, converter and transmission assembly. As regards claim 19, the reference to Tabata et al. already teaches the use of a rotary shock/vibration damper, but fails to teach the use of such a device in a pulley. Inasmuch as the rotary dampers are well known and employed to advantage to reduce backlash in drive systems, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the rotary damper in a pulley (taught by the modifying reference to Brinkmeyer et al.) for the purpose of reducing shock and backlash in the connection between the engine and converter drive, as close to the connection to the converter as possible, thus reducing the distance shock is transferred through the drive system.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tabata et al. in view of Fujita et al. (US 4,869,332). The reference of Tabata et al. fails to teach the connection to the energy converter as being a pair of fixed-ratio gear pairs (transfer elements, each forming a torque path), wherein one each of the respective gear sets is employed for one each of a pair of modes. Fujita et al. teach an interactive connection between an engine drive shaft and an electrical energy converter (2) mounted on a shaft (3), including first and second pairs of fixed-ratio gear sets which serve as transfer elements (5 & 6; 7 & 9) wherein each gear- or transfer element- set forms a torque path for a respective one of two modes, the flow through each path being governed by one of a pair of clutches (4, 10-- one per gear set), which are located upstream or downstream of a source of torque, dependent upon the direction of flow of the torque. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a dual gear set transfer device such as taught by Fujita et al. in place of the transfer device (16) taught by Tabata et al. in order to reduce the complexity of the connection between the converter and drive shaft, and to allow fixed transfer rates and rpm ratios between the respective operating modes of the vehicle of Tabata et al.

Allowable Subject Matter

8. Claims 21-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Comments

9. Applicant's comments have been carefully considered. As regards the reference to Tabata et al., and the operation of the interactive rotary connection, applicant is reminded that (1) the connection may comprise the controller 50, and (2) the nature of a differential gear set allows plural ratios to be achieved based on the particular speeds of the plural input and output shafts, which is a function inherent in a differential gear set, to the breadth that applicant is actually claiming this feature in the claims.

As such, it appears as though applicant may be arguing limitations of a scope different than the scope actually encompassed by the set-forth claim language. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It is not proper for an examiner to interpret the claims as including limitations which are not actually recited therein (From MPEP 2111):

During patent examination, the pending claims must be given their broadest reasonable interpretation consistent with the specification. In *re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In *re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969) The court explained that "reading a claim in light of the specification, to thereby interpret limitations explicitly recited in the claim, is a quite different thing from 'reading limitations of the specification into a claim,' to thereby narrow the scope of the claim by implicitly adding disclosed limitations which have no express basis in the claim." The court found that applicant was advocating the latter, i.e., the impermissible importation of subject

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matter from the specification into the claim.). See also *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry specifically concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 571-272-6701.

Any inquiries of a general nature or relating to the status of this application may be made through either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A response to this action should be mailed to:

Mail Stop _____
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450,

Or faxed to:

PTO Central Fax: 571-273-8300

F. VANAMAN
Primary Examiner
Art Unit 3618



8/22/05